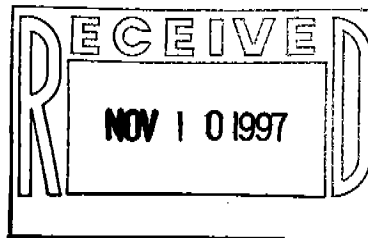




LAW

ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

November 4, 1997



Ms. Sharon Cihak
Guilford County Department of Public Health
Environmental Health Division
301 North Eugene Street
Greensboro, North Carolina 27401

Subject: **Underground Storage Tank Closure Report**
NOAA - National Weather Service
6425 Airport Parkway
Greensboro, Guilford County, North Carolina
LAW Project 30459-7-0955


Dear Ms. Cihak:

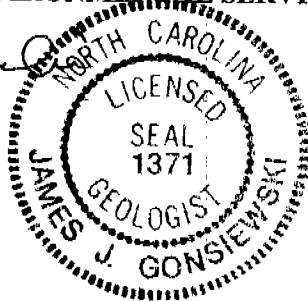
On behalf of the National Weather Service and A & D Environmental and Industrial Services, Inc., Law Engineering and Environmental Services, Inc. (LAW) is submitting this Underground Storage Tank Closure Report for the subject site. Included in this report is a description of the field activities, the results obtained, and our conclusions and recommendations.


This closure report has been prepared in general accordance with the Underground Storage Tank Closure Report guidelines presented in the GW/UST-12 form dated October 1994. We appreciate your consideration and cooperation in the submission of this report.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.


James J. Gonsiewski, L.G.
Project Geologist
Licensed NC 1371




Jeffrey L. Gerlock, L.G.
Principal Geologist
Licensed NC 1141

Attachments

cc: Mr. Jerry Stanley

TABLE OF CONTENTS

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I. GENERAL INFORMATION	1
II. CLOSURE PROCEDURES	2
III. SITE INVESTIGATION	3
IV. BACKFILLING OPERATIONS	4
V. CONCLUSIONS AND RECOMMENDATIONS	5

FIGURES

Figure 1 - Site Location Map

Figure 2 - Site Plan

PHOTOGRAPHS

APPENDIX

Form GW/UST-3

Form GW/UST-2

Tank Disposal Manifest

Laboratory Data and Chain of Custody Record

November 4, 1997

I. GENERAL INFORMATION

The subject site is the NOAA - National Weather Service building at 6425 Airport Parkway in Greensboro, Guilford County, North Carolina (Figure 1). Information regarding site ownership, facility information, project contacts, underground storage tank (UST) information, and characteristics of the site is presented below:

A. Ownership of UST

NOAA - National Weather Service
6425 Airport Parkway
Greensboro, North Carolina 28202
910-668-9269

B. Facility Information

NOAA - National Weather Service
6425 Airport Parkway
Greensboro, North Carolina 28202
910-668-9269

C. Contacts

Primary Contact: Mr. Johnny Smith
NOAA - National Weather Service
6425 Airport Parkway
Greensboro, North Carolina 28202
910-668-9269

Closure Contractors: A&D Environmental and Industrial Services
2718 Uwharrie Road
High Point, North Carolina 27263
(910) 434-7750

Primary Consultant: Law Engineering and Environmental Services, Inc.
7347-F West Friendly Avenue
Greensboro, North Carolina 27410
(910) 294-4221

Laboratory: Law Environmental National Laboratories
3355 McLemore Drive
Pensacola, Florida
(904) 857-0606
North Carolina Certification Number 425

D. UST Information

Tank Number	Installation Date	Size	Tank Dimensions	Last Contents	Previous Contents
1	1983	500 gallons	48 in x 63 in.	Diesel	None

E. Site Characteristics

The subject site is the NOAA - National Weather Service building located at 6425 Airport Parkway in Greensboro, Guilford County, North Carolina (Figure 1). The site is located in a commercial area of Greensboro, North Carolina adjacent to the Piedmont-Triad International Airport. The 500 gallon UST was used to store diesel for use in the emergency generator on the site. There are no confirmed past releases from the on-site UST. A 500 gallon aboveground storage tank (AST) system has been installed at the site (Figure 2).

No water supply wells were observed on site and the area is served by the municipal water supply. The nearest surface water feature is an unnamed tributary of Brush Creek located approximately 900 feet northwest of the building (Figure 1).

The site is located in the Piedmont Physiographic Province. The soil and rock which underlie the site include metamorphosed quartz diorite of the Carolina Slate Belt (North Carolina Geological Survey, 1985). Local precipitation is the source of practically all of the ground water in the surficial aquifer in this area. A portion of the precipitation infiltrates into the ground and moves under the influence of gravity to the water table. After the water has reached the water table, the direction of movement is generally parallel to the hydraulic gradient. In the Piedmont Physiographic Province, the slope of the water table under static conditions (no pumping or recharge interference) approximates the topography of the area. Thus, the movement of ground water will be approximately in the direction of the topographic slope. The movement of ground water results in discharge to streams, lakes, or springs where the ground water intersects the topographic lows occupied by these water bodies. Based on the topographic map of the site vicinity, ground water at the site appears to flow to the north and northwest (Figure 1).

II. CLOSURE PROCEDURES

UST Removal Activities

The Guilford County Department of Public Health and the Greensboro Fire Department were notified by telephone prior to the UST removal operations. Additionally, a GW/UST-3 form was filed with the Guilford County Department of Public Health in Greensboro on October 10, 1997.

A copy of this form is included in the Appendix. Utilities at the site were located by National Weather Service personnel prior to UST removal activities. On October 14, 1997, UST removal activities were performed by A&D Environmental and Industrial Services, Inc. (A&D) of Archdale, North Carolina using a backhoe. The former location of the UST and the fuel line from the UST to the building are shown on Figure 2.

A&D removed approximately 250 gallons of fuel from the UST and the associated piping on October 14, 1997. On October 14, 1997, A&D removed the UST (see Photograph 1). The associated piping was drained and capped. The UST was in good condition with no pitting or holes visible (see Photograph 2). The UST was transported to A&D for disposal. A copy of the tank disposal manifest is included in the Appendix.

The top of the UST was approximately two feet below the ground surface. The UST was secured with straps attached to a concrete pad beneath the UST. The final excavation for the UST was approximately 9 feet long, 8 feet wide and 7 feet deep. The soil in the UST excavation consisted of reddish to tan brown sandy silt to an approximate depth of 7 feet below grade. No petroleum hydrocarbon odor or staining was observed in the soil at the base of the excavation. No soil was removed from the excavation. The excavation was backfilled with clean fill material as discussed in Section VI.

LAW personnel collected four soil samples from beneath the former location of the UST (CS-1 through CS-4) on each side of the concrete pad and one sample from beneath the fuel line (CS-5) on October 14, 1997 (Figure 2). The soil samples were collected approximately one foot below the depth of the concrete pad and fuel line at depths ranging from approximately 3 (fuel line) to 8 (UST) feet below grade. Details of the field procedures are discussed below.

III. SITE INVESTIGATION

Sample Collection Procedures

The soil samples collected from the floor of the excavation and beneath the fuel line during the UST removal activities were manually collected from the bucket of the backhoe using new, disposable vinyl gloves. Each soil sample was immediately placed into a plastic zip-lock bag.

A representative portion of each soil sample placed into the plastic zip-lock bags were placed in a warm location. Approximately 10 minutes after the time of collection, the bag was opened slightly and the probe of a Century 128 Organic Vapor Analyzer (OVA) was inserted. The meter of the OVA was monitored and the reading recorded. No organic vapors were detected in the samples. Since no odors or organic vapors were detected in the soil samples collected around the concrete pad, the samples from the ends of the pad (CS-2 and CS-4) along with the sample collected from beneath the fuel line (CS-5) were selected for laboratory analysis.

Each soil sample collected for laboratory analysis was placed into new 2-ounce and 8-ounce capacity clean glass containers. After being filled, each sample container was labeled with the project name and number, the time and date of sample collection, the analyses to be performed, and the absence or presence of preservative. The filled sample containers were placed into a cooler. Plastic bags containing ice were packed around the sample containers in the cooler to maintain the samples at approximately 4° Centigrade. The samples were shipped to Law Environmental National Labs (LENL) in Pensacola, Florida for analysis for volatile and semi-volatile total petroleum hydrocarbons (TPH) using EPA Methods 5030/8015M and 3550/8015M, respectively. The Chain of Custody was maintained as documented in the Appendix.

Laboratory Analytical Results

Laboratory analysis of the soil samples collected from beneath the UST and fuel line did not detect volatile or semi-volatile TPH above the State of North Carolina action levels of 10 parts per million (ppm) for volatile TPH and 40 ppm for semi-volatile TPH. The soil analytical results are presented on Figure 2. Laboratory test data sheets are included in the Appendix.

IV. BACKFILLING OPERATIONS

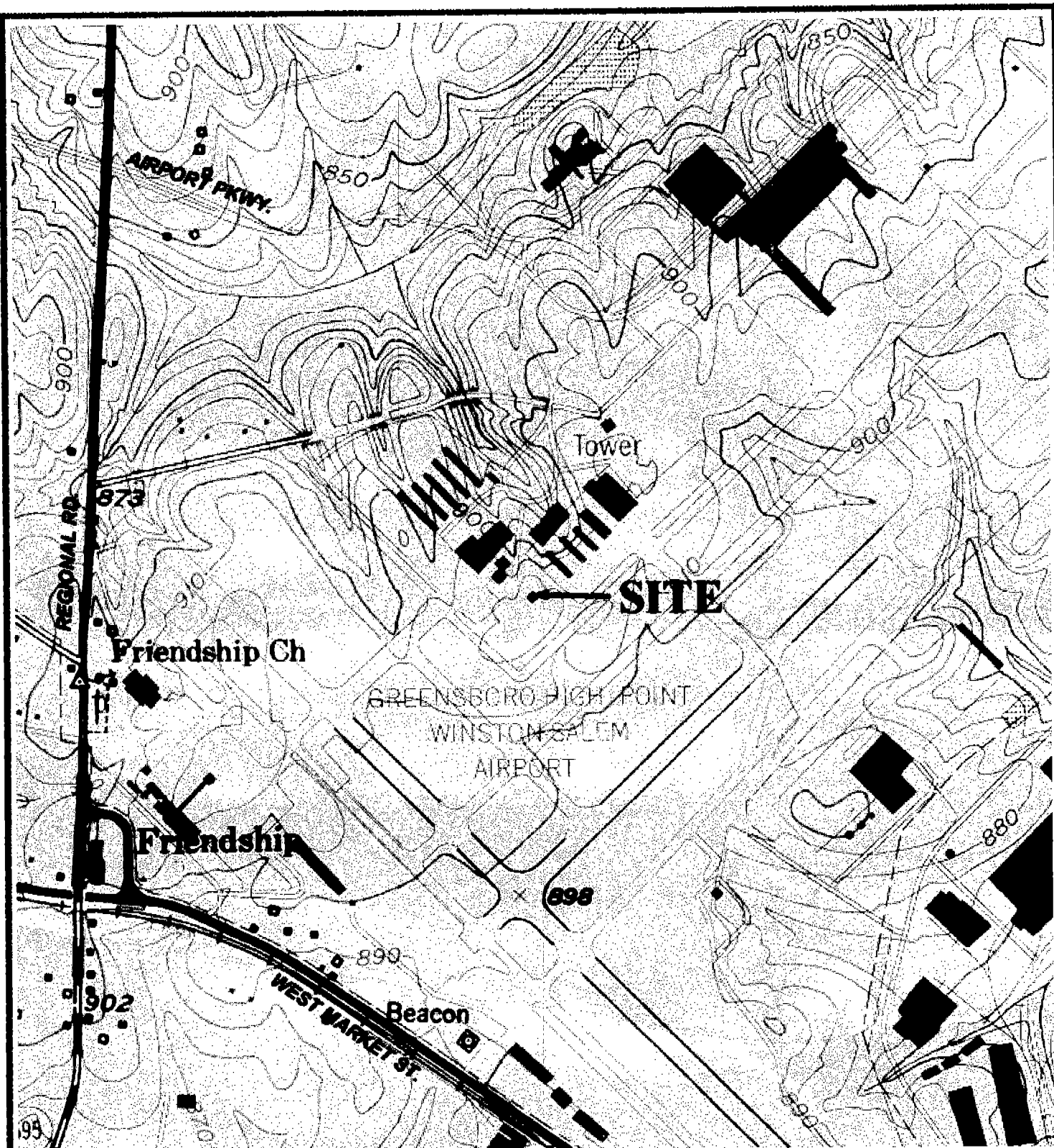
On October 14, 1997 backfilling was initiated. The backfill material consisted of soil encountered during the UST removal activities and clean backfill from A-1 Sandrock in Greensboro. The backfill was compacted with the bucket of the backhoe.

V. CONCLUSIONS AND RECOMMENDATIONS

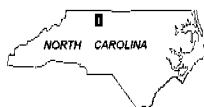
Laboratory analysis of soil samples collected from beneath the former on-site UST did not detect volatile or semi-volatile TPH above the State of North Carolina action levels. Based on LAW's field activities, it does not appear that a release has occurred from the former on-site UST, therefore, we do not recommend further assessment at this time. We recommend that this report be presented to the Guilford County Department of Public Health in Greensboro, North Carolina for issuance of a clean closure letter for this site.

The activities and evaluative approaches used in this assessment are consistent with those normally employed in assessment projects of this type. Our evaluation of site conditions has been based on our understanding of the project information and the data obtained during our field activities.

FIGURES



APPROXIMATE SCALE
 1000 500 0 1000
 (IN FEET)



REF: U.S.G.S. TOPOGRAPHIC MAP,
 GUILFORD, N.C. QUADRANGLE,
 DATED 1951, PHOTOREVISED 1994.



LAW

ENGINEERING AND ENVIRONMENTAL SERVICES
 GREENSBORO, NORTH CAROLINA

SITE LOCATION MAP

NATIONAL WEATHER SERVICE - 6425 AIRPORT PARKWAY
 GREENSBORO, NORTH CAROLINA

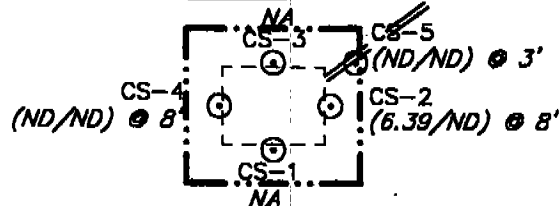
PREPARED BY <i>[Signature]</i>	DATE <i>10/31/99</i>	CHECKED <i>[Signature]</i>	<i>11/3/97</i>
JOB NO. <i>[Signature]</i>	30459-7-0955	FIGURE	1

NATIONAL
WEATHER
SERVICE
BUILDING

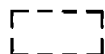
ABOVEGROUND
STORAGE TANK

GENERATOR
BUILDING

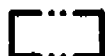
TRANSFORMER



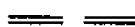
LEGEND



FORMER UST



EXCAVATION AREA



APPROXIMATE LOCATION OF FUEL LINE



SAMPLE LOCATION

(ND/ND) @ 8'

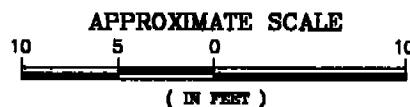
VOLATILE/SEMI-VOLATILE TPH CONCENTRATION
IN SOIL IN PARTS PER MILLION (PPM)
AT DEPTH SHOWN

ND

NOT DETECTED

NA

NOT ANALYZED



ALL LOCATIONS ARE APPROXIMATE.



LAW

ENGINEERING AND ENVIRONMENTAL SERVICES
GREENSBORO, NORTH CAROLINA

SITE PLAN

NATIONAL WEATHER SERVICE - 6425 AIRPORT PARKWAY
GREENSBORO, NORTH CAROLINA

PREPARED BY *[Signature]* DATE 0/3/00 CHECKED *[Signature]* DATE 11/3/97
JOB NO. 30459-7-0955 FIGURE 2

REF: FIELD NOTES BY
LAW PERSONNEL

10.20.97-13:29 955AIR

PHOTOGRAPHS



**Photograph 1: View of UST
during removal.**



Photograph 2: Closeup of UST.

**National Weather Service
6425 Airport Parkway
Greensboro, North Carolina
30459-7-0955**



LAW

**ENGINEERING AND ENVIRONMENTAL SERVICES
GREENSBORO, NORTH CAROLINA**

APPENDIX

GW/UST-3 Notice of Intent: UST Permanent Closure or Change-In-Service

FOR TANKS IN NC

Return Completed Form To:
The appropriate DEM Regional Office according to the county of the facility's location. [SEE REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS].

State Use Only
I. D. Number _____
Date Received _____

INSTRUCTIONS
Complete and return five (5) working days prior to closure or change-in-service.

I. OWNERSHIP OF TANK(S)
Tank Owner Name: NOAA National Weather Service
Street Address: 6425 Airport Parkway
County: Guilford
City: Greensboro State: NC Zip Code: 27409
Tele. No. (Area Code): _____

II. LOCATION OF TANK(S)
Facility Name or Company: NOAA National Weather Service
Facility ID # (if available): 0-010697
Street Address or State Road: 6425 Airport Parkway
County: Guilford City: Greensboro Zip Code: 27407
Tele. No. (Area Code): _____

III. CONTACT PERSON
Name: John Smith Job Title: National Weather Service Telephone Number: (910) 668-9269

- IV. TANK REMOVAL, CLOSURE IN PLACE, CHANGE-IN-SERVICE
1. Contact Local Fire Marshall.
2. Plan the entire closure event.
3. Conduct Site Soil Assessments.
4. If Removing Tanks or Closing in Place refer to API Publications 2015 "Cleaning Petroleum Storage Tanks" & 1604 "Removal & Disposal of Used

5. Provide a sketch locating piping, tanks and soil sampling locations.
6. Fill out form GW/UST-2 "Site Investigation Report for Permanent Closure" and return within 30 days following the site investigation.

7. The site assessment portion of the tank closure must be conducted under the supervision of a Professional Engineer or Licensed Geologist. After January 1, 1994, all closure site assessment reports must be signed and sealed by a P.E. or L.G.
8. Keep closure records for 3 years.

V. WORK TO BE PERFORMED BY:

Contractor Name: A&D Environmental & Industrial Services
Address: 2718 Uwharrie Road State: North Carolina Zip Code: 27263
Contact: Jerry Stanley Phone: (910) 434-7750
Primary Consultant: LAW Engineering Phone: (910) 294-4221

VI. TANK(S) SCHEDULED FOR CLOSURE OR CHANGE-IN-SERVICE			PROPOSED ACTIVITY		
TANK ID#	TANK CAPACITY	LAST CONTENTS	CLOSURE		CHANGE-IN-SERVICE
			Removal	Abandonment In Place	New Contents Stored
<u>1</u>	<u>500 gallons</u>	<u>Diesel</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	

VII. OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE

Name and official title: James J. Gonsiewski, Project Geologist

Signature: [Signature] *Scheduled Removal Date: 10-14-97

Date Submitted: 10/6/97

If scheduled work date changes, notify your appropriate DEM Regional Office 48 hours prior to originally scheduled date.

FOR
TANKS
IN
NC

Return Completed Form To:

The appropriate DWQ Regional Office according to the county of the facility's location.
[SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL
OFFICE ADDRESS].

State Use Only

I.D. Number _____

Date Received _____

INSTRUCTIONS

Complete and return within (30) days following completion of site investigation.

I. Ownership of Tank(s)

Owner Name: NOAA National Weather Service
Corporation, Individual, Public Agency, or Other Entity)
Street Address: 6425 Airport Parkway
County: Guilford
City: Greensboro State: NC Zip Code: 27409
Telephone Number: (910) 668-9269
(Area Code)

II. Location of Tank(s)

Facility Name: NOAA National Weather Service
(or Company)
Facility ID # (if available): 0-010697
Street Address 6425 Airport Parkway
(or State Road)
County: Guilford City: Greensboro Zip Code: 27409
Telephone Number: (910) 668-9269
(Area Code)

III. Contact Person

Name: John Smith Job Title: National Weather Service Tel. No.: 910-668-9269
Closure Contractor: A & D Environmental Address: 2718 Uwharrie Rd, Archdale NC Tel. No.: 910-434-7750
Primary Consultant: LAW Engineering Address: 7347-F W. Friendly, Greensboro NC Tel. No.: 910-294-4221
Lab: LAW Environmental Labs Address: 3355 McLeMure Drive Tel. No.: 904-857-0606
Pensacola FL 32514

IV. U.S.T. Information

V. Excavation Condition

VI. Additional Information Required

Tank No.	Size in Gallons	Tank Dimensions	Last Contents	Water In Excavation		Free Product		Notable Odor or Visible Soil Contamination	
				Yes	No	Yes	No	Yes	No
1	500	48"x63"	Diesel		XX		XX		XX

See reverse side of pink copy (owner's copy) for additional information required by N.C. - DWQ in the written report and sketch.

NOTE: If a release from the tank(s) has occurred, the site assessment portion of the tank closure must be conducted under the supervision of a P.E. or L.G., with all closure site assessment reports bearing the signature and seal of the P.E. or L.G.

VII. Check List (Check the activities completed)

PERMANENT CLOSURE (For Removing or Abandoning-in-place)

- ☒ Contact local fire marshal.
☒ Notify DWQ Regional Office before abandonment.
☒ Drain & flush piping into tank.
☒ Remove all product and residuals from tank.
☒ Excavate down to tank.
☒ Clean and inspect tank.
☒ Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures.
☒ Cap or plug all lines except the vent and fill lines.
☒ Purge tank of all product & flammable vapors.
☒ Cut one or more large holes in the tanks.
☒ Backfill the area.
 Date Tank(s) Permanently closed: 10-14-97
 Date of Change-in-Service: _____

ABANDONMENT IN PLACE

- ☐ Fill tank until material overflows tank opening.
☐ Plug or cap all openings.
☐ Disconnect and cap or remove vent line.
☐ Solid inert material used - specify: _____

REMOVAL

- ☒ Create vent hole.
☒ Label tank.
☒ Dispose of tank in approved manner.
 Final tank destination: A&D Environmental
High Point

VIII. Certification (Read and Sign)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Print name and official title of owner or owner's authorized representative

James J. Gonsiewski, Project Geologist

Signature

James J. Gonsiewski

Date Signed

10/24/97

MATERIAL MANIFEST

A & D Environmental and Industrial Services, Inc.

A&D 10/95

Manifest Document No. A&D 971210-01	
Page 1	of 1
A & D Job No. 971210	

EMERGENCY PHONE NO. (800) 434-7750
POST OFFICE BOX 484 TEL (910) 434-7750
HIGH POINT, NC 27261 FAX (910) 434-7752

GENERATOR INFORMATION

Name Petroleum Equipment (Piedmont Airport)		US EPA ID No.
Street Address Piedmont Triad Airport	Mailing Address	Phone No.
		Contact

DESCRIPTION OF MATERIALS

HM	USDOT Proper Shipping Name (Complete All Items for Hazardous Materials)	Hazard Class or Div.	UN / NA ID No.	Packing Group	Containers Qty. Type	Total Quantity	Unit Wt./ Vol.
X	#2 Fuel oil	3	1993	III	1 TI	250	gal

ADDITIONAL INFORMATION	ERG No.	A & D Profile Code	Facility Use

GENERATOR'S CERTIFICATION

I certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 281.

Printed / Typed Name JOHNNIE M. SMITH	Signature <i>Johnnie M. Smith</i>	Mo. / Day / Yr. 10/14/97
---	--------------------------------------	------------------------------------

Transporter A & D ENVIRONMENTAL AND INDUSTRIAL SERVICES		I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.	
Address 18 UWHARRIE ROAD RICHDALE, NC 27263		Signature <i>Reedney Ret...</i>	Shipment Date 10-14-97
Transporter or A ID No. NCD986232221	Unit No. UTS	I hereby acknowledge that the above-described materials were received from the generator site and were transported to the facility listed below.	
Phone (910) 434-7750		Signature <i>Reedney Ret...</i>	Delivery Date 10-14-97

Facility A & D ENVIRONMENTAL AND INDUSTRIAL SERVICES		I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.	
Address 18 UWHARRIE ROAD RICHDALE, NC 27263		Signature <i>DAVID TEDDER</i>	Receipt Date 10/14/97
Facility or A ID No. NCD986232221	Discrepancies / Routing Codes / Handling Methods		
Phone (910) 434-7750	a. <i>Reedney</i>		
Contact DAVID TEDDER	b. <i>Reedney</i>		
		c. <i>Reedney</i>	



Environmental and Industrial Services

P. O. Box 484 • High Point, NC • Phone (910) 434-7750 • FAX (910) 434-7752

TANK DISPOSAL MANIFEST

1) Tank Owner/Authorized Representative: Name and Mailing Address NATIONAL Weather Serv
6425 Airport PARKWAY Greensboro 27409

2) Tank Owner/Authorized Representative: Contact _____
Phone#: _____

3) Description Of Tanks:

<u>Tank No.</u>	<u>Capacity</u>	<u>Previous Contents</u>	<u>Comments</u>
<u>1</u>	<u>500</u>	<u>HC Fuel</u>	

4) Tank Owner/Authorized Representative Certification: The undersigned certifies that the above listed storage tanks have been removed from the premises of the tank owner.

LANNIE M. SMITH Lannie M. Smith 10/14/97
Printed/Typed Name Signature Month/Day/Year

5) Transporter: The undersigned certifies that the above listed storage tanks have been transported to A&D Environmental and Industrial Services, 2718 Uwharrie Road, Archdale, N.C. 27263.

Doug Johnson GAZT Johnson 10/14/97
Printed/Typed Name Signature Month/Day/Year

6) Disposal Certification: The undersigned certifies that the above-named storage tank(s) have been cut into scrap pieces and accepted by the metal recycling facility.

Recycling Facility: D H Gifford Wrecking Co
Lori Kidd Lori Kidd 10/23/97
Printed/Typed Name Signature Month/Day/Year



LAW

ENGINEERING AND ENVIRONMENTAL SERVICES

October 22, 1997

Mr. Jim Gonsiewski
Law Eng. & Env. Svcs., Inc.
7347-F West Friendly Avenue
Greensboro, NC 27410

Subject: Chemical Analysis of Samples Received on 10/15/97
NOAA, Project No. 30459-7-0955.916

Dear Mr. Gonsiewski:

Law Engineering and Environmental Services, Inc., National Laboratories has completed its analysis of your samples and reports the results on the following pages. These results relate only to the contents of the samples as submitted.

If further assistance is needed, please feel free to contact me at (850) 969-6135.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
NATIONAL LABORATORIES

Kelli Silva
Project Manager

Enclosures: Data Report
Invoice

3355 McLemore Drive
Pensacola, Florida 32514
(850) 857-0606

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

10/22/97

--- Project Information ---

Mr. James Gonsiewski

Page 1

Law Eng & Envir Services, Inc.

Project Name: NOAA

7347-F West Friendly Ave

NOAA 30459-7-0955.916

Greensboro, NC 27410

--- Sample Information ---

Station ID: CS-2

Date Sampled: 10/14/97

Lab ID: AB32760

Time Sampled: 09:30

Collector: J. GONSIEWSKI

Log In Date: 10/15/97

Log In Time: 14:18

--- Test Information ---

Analysis

Parameter	Units	Method	Rpt Lim	Result	Date	Tech
622-8015M TPH VOA S mg/Kg	mg/Kg	8015M		<u>TITLE</u>	10/16/97	AG
Petroleum Hydrocarbons (Gasoline)	mg/Kg	8015M	0.126	6.39	10/16/97	AG
623-Tot Pet Hydro Prep S		8015M		Done	10/17/97	LB
621-8015M TPH SVOA S mg/Kg	mg/Kg	8015M		<u>TITLE</u>	10/20/97	GT
Petroleum Hydrocarbon (Diesel)	mg/Kg	8015M	8.48	Not Det	10/20/97	GT

Remarks:

Signed: CB Causey
for
Keith R Greene
Quality Control Manager

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

10/22/97

--- Project Information ---

Mr. James Gonsiewski

Page 1

Law Eng & Envir Services, Inc.

Project Name: NOAA

7347-F West Friendly Ave

NOAA 30459-7-0955.916

Greensboro, NC 27410

--- Sample Information ---

Station ID: CS-4

Date Sampled: 10/14/97

Lab ID: AB32761

Time Sampled: 09:35

Collector: J. GONSIEWSKI

Log In Date: 10/15/97

Log In Time: 14:18

--- Test Information ---

Analysis

Parameter	Units	Method	Rpt Lim	Result	Date	Tech
622-8015M TPH VOA S mg/Kg	mg/Kg	8015M		<u>TITLE</u>	10/16/97	AG
Petroleum Hydrocarbons (Gasoline)	mg/Kg	8015M	0.122	Not Det	10/16/97	AG
623-Tot Pet Hydro Prep S		8015M		Done	10/17/97	LB
621-8015M TPH SVOA S mg/Kg	mg/Kg	8015M		<u>TITLE</u>	10/20/97	GT
Petroleum Hydrocarbon (Diesel)	mg/Kg	8015M	8.16	Not Det	10/20/97	GT

Remarks:

Signed:

for
Keith R Greene

Quality Control Manager

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

10/22/97

--- Project Information ---

Mr. James Gonsiewski

Page 1

Law Eng & Envir Services, Inc.

Project Name: NOAA

7347-F West Friendly Ave

NOAA 30459-7-0955.916

Greensboro, NC 27410

--- Sample Information ---

Station ID: CS-5

Date Sampled: 10/14/97

Lab ID: AB32762

Time Sampled: 09:45

Collector: J. GONSIEWSKI

Log In Date: 10/15/97

Log In Time: 14:18

--- Test Information ---

Analysis

Parameter	Units	Method	Rpt Lim	Result	Date	Tech
622-8015M TPH VOA S mg/Kg	mg/Kg	8015M		<u> TITLE </u>	10/16/97	AG
Petroleum Hydrocarbons (Gasoline)	mg/Kg	8015M	0.123	Not Det	10/16/97	AG
623-Tot Pet Hydro Prep S		8015M		Done	10/17/97	LB
621-8015M TPH SVOA S mg/Kg	mg/Kg	8015M		<u> TITLE </u>	10/21/97	GT
Petroleum Hydrocarbon (Diesel)	mg/Kg	8015M	8.22	Not Det	10/21/97	GT

Remarks:

Signed: CB Causey
for
Keith R Greene
Quality Control Manager

LAW ENVIRONMENTAL NATIONAL LABORATORIES

TEST DATA REPORT

10/22/97

--- Project Information ---

Mr. James Gonsiewski

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Law Eng & Envir Services, Inc.

Project Name: NOAA

7347-F West Friendly Ave

NOAA 30459-7-0955.916

Greensboro, NC 27410

--- Sample Information ---

Station ID: TRIP BLANK

Date Sampled: 10/14/97

Lab ID: AB32763

Time Sampled: 00:00

Collector: J. GONSIEWSKI

Log In Date: 10/15/97

Log In Time: 14:18

--- Test Information ---

Analysis

Parameter	Units	Method	Rpt Lim	Result	Date	Tech
622-8015M TPH VOA W mg/L	mg/L	8015M		<u>TITLE</u>	10/16/97	AG
Petroleum Hydrocarbons (Gasoline)	mg/L	8015M	0.100	Not Det	10/16/97	AG

Remarks:

Signed: CB Causey
 FOR
 Keith R Greene
 Quality Control Manager



ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

LENL QUOTE #

PROJECT NAME:

NOAA

PROJECT NO.: 30459-2-0855

PHASE NO.:

TASK NO.: 916

PROJECT MANAGER:

Gierlock Gonsiewski

TAT: (2WK)

HC LAB TAT: (1 WK)

RUSH

(INCURS RUSH FEE)

SAMPLE I.D.:

SS CS-2, CS-4, CS-5

COC NO.:

18098

TOTAL DISSOLVED

METALS ELEMENT	ICP/FLAME	AA-GF
ALUMINUM	6010	7041
ANTIMONY	6010	7060
ARSENIC	6010	7060
BARIUM	6010	7091
BERYLLIUM	6010/7090	7131
CADMIUM	6010/7130	7191
CALCIUM	6010	7201
CHROMIUM	6010/7190	7201
COBALT	6010	7201
COPPER	6010/7210	7421
LEAD	6010/7420	7421
MAGNESIUM	6010	7480
MANGANESE	6010/7480	7841
MERCURY	7470/7471	7911
MOLYBDENUM	6010	7911
NICKEL	6010/7520	7911
POTASSIUM	6010	7761
SILVER	6010/7760	7740
SELENIUM	6010	7740
SODIUM	6010	7841
STRONTIUM	6010	7841
THALLIUM	6010	7841
TIN	6010	7911
TITANIUM	6010	7911
VANADIUM	6010	7911
ZINC	6010/7950	7911

GC/MS	WATER	SOIL
VOLATILE ORGANICS	8240/624	8240
VOLATILE ORGANICS	8260	8260
BASE NEUTRAL EXTRACTABLES	8270/625	8270
ACID EXTRACTABLES	8270/625	8270

GC	WATER	SOIL
HALOGENATED VOLATILE ORGANICS	8010/601	8010
AROMATIC VOLATILE ORGANICS	8020/602	8020
HALOGENATED & AROMATIC VOLATILE	8021	8021
PHENOLS	8040/604	8040
PESTICIDES AND/OR PCB'S	8080/608	8080
POLYNUCLEAR AROMATIC HYDROCARBONS	8100/610	8100
HERBICIDES (2,4-D & 2,4,5-TP)	8150	8150
ETHYLENE DIBROMIDE (EDB)	8011/504	8011

RCRA HAZARDOUS WASTE ID	IGNITABILITY
TCLP METALS	CORROSIVITY (PH)
TCLP HERBICIDES	REACTIVITY (HCN, H2S)
TCLP PESTICIDES	PAINT FILTER
TCLP ACID EXTRACTABLES	
TCLP BASE NEUTRALS EXTRACTABLES	
TCLP VOLATILES	

INORGANICS (PLEASE COMPLETE BELOW):

HYDROCARBON (UST)	WATER	SOIL
BTEX/MTBE/PE	8020/602	8020
PETROLEUM HYDROCARBONS-IR	418.1	418.1
OIL & GREASE (GRAVIMETRIC)	9070	9071
PETROLEUM OIL & GREASE (W/SILICA GEL)	9070	9071

TPH-SEMI-VOLATILE	TPH-VOLATILE
CAL/DHS	CAL/DHS
3550/SFB	5030/8015
3550/SFB	5030/SFB
DRO-TENN/3550	GRO-TENN/5030
WTPH-DWA	WTPH-GWA
IOWA/3550	IOWA/5030
GAS/DIESEL-8015/WA	

REGULATORY GROUPS	APPENDIX IX (FEDERAL)
PRIORITY POLLUTANT SCAN	APPENDIX IX (STATE OF GEORGIA)
PRIORITY POLLUTANT INORGANICS	APPENDIX I (MSWLF)
PRIORITY POLLUTANT ORGANICS	APPENDIX II (MSWLF)
TARGET COMPOUND LIST (TCL)	
TARGET ANALYTE LIST (TAL)	

REMARKS:

COMPLETED BY:

DATE: